

## U.S. Fish & Wildlife Service Sacramento Fish & Wildlife Office

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### Species Account KERN MALLOW

Eremalche kernensis

**CLASSIFICATION: Endangered** 

Federal Register Notice 55:29361; July 19, 1990 <a href="http://ecos.fws.gov/docs/federal\_register/fr1729.pdf">http://ecos.fws.gov/docs/federal\_register/fr1729.pdf</a> (3.5 MB)

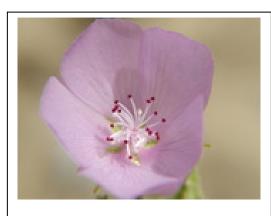
#### STATE LISTING STATUS AND CNPS CODE:

The California Native Plant Society has placed this species on List 1B (rare or endangered throughout its range). The species has not been listed by the State of California.

CRITICAL HABITAT: None designated

RECOVERY PLAN: Recovery Plan for Upland Species of the San Joaquin Valley, California 1998 http://ecos.fws.gov/docs/recovery\_plan/980930a.pdf

5-YEAR REVIEW: Initiated March 22, 2006 <a href="http://ecos.fws.gov/docs/federal\_register/fr5047.pdf">http://ecos.fws.gov/docs/federal\_register/fr5047.pdf</a>



Kern Mallow © 2003 Brent Miller

#### **DESCRIPTION:**

The most recent treatment assigns Kern mallow the scientific name *Eremalche parryi* ssp. *kernensis*. However, this argument has not been completely accepted by the scientific community.

For the time being, the Service will use *E. kernensis*, which was the name used when Kern mallow was listed in 1990.

See Hickman (1993) in General Information about California Plants, below, for a detailed taxonomy and description of the species.

Kern mallow is a small, annual herb belonging to the mallow family (Malvaceae). It has predominantly white to sometimes pale lavender, hollyhock-like flowers. Flowers have five petals. Wheel-shaped fruits are divided into single-seeded segments.

The form of the plant varies from single-stemmed to multiple-stemmed, with the central stem erect and the lateral stems trailing along the ground. Stems range from less than 2.5 centimeters (1 inch) to about 50 centimeters (20 inches).

Kern mallow seeds typically germinate in January and February, and plants begin flowering in March. Fruit production begins within a few days after flowers appear. Flowering and fruit production may continue into May under favorable moisture and temperature conditions.

The duration of seed viability in the soil is unknown and it is thought that at least some seeds remain ungerminated in the following growing season. Seed dispersal agents are unknown, but may include animals and wind.



Kern Mallow © 2009 Keir Morse

Like many annual plants, population size varies with rainfall and has been observed to fluctuate dramatically from one year to another, to the point that it may not be detected at all at known locations in years of below-average rainfall.

#### **DISTRIBUTION:**

Kern mallow is known for sure from a metapopulation consisting of intermittent occurrences within an area of approximately 40 square miles at the eastern base of the Temblor Range in the Lokern area of western Kern County. The distribution runs from the vicinity of McKittrick to near Buttonwillow. See the recovery plan above for discussion of other possible locations.

The species typically occurs in valley saltbush scrub communities, where it grows under and around spiny and common saltbushes and in patches with other herbaceous plants. It typically grows in areas where shrub cover is less than 25 percent, on alkaline sandy loam or clay soils, and at elevations of 315 to 900 feet.

U.S. Geological Survey 7.5 Minute Quads: Mouth Of Kern (216A) 3511923, Taft (216B) 3511924, Maricopa (216C) 3511914, Fellows (217A) 3511925, Rio Bravo (241A) 3511943, East Elk Hills (241C) 3511934, Lokern (242A) 3511945, Belridge (242B) 3511946, Reward (242C) 3511936, West Elk Hills (242D) 3511935, Lost Hills NW (265B)\* 3511966, Semitropic (265D) 3511955, Allensworth (288C) 3511974, Delano West (288D) 3511973. (\* Presumed extirpated)

#### THREATS:

Approximately 85 percent of the Kern mallow habitat is privately owned and is vulnerable to effects of many uses, particularly oil and gas exploration and development.

Although the current level of petroleum production, as practiced with Kern mallow impact avoidance and minimization measures implemented by private companies as well as in Bureau of Land Management-authorized actions,

#### Upland Plants of the San Joaquin Valley

Loss and degradation of natural communities due t agriculture, urbanization, livestock grazing, water impoundment and diversion, historical predator and pest control, and other human activities have jeopardized nearly all the unique biota of the San Joaquin Valley below the woodland belts, and are the major causes of endangerment of the state and federally listed species.

does not seem to significantly threaten the remaining Kern mallows, increased production levels could cause further habitat fragmentation and loss of localized Kern mallow colonies.

Either uncontrolled grazing or the absence of grazing may threaten the Kern mallow. Sheep have grazed private land in the Lokern area for decades, and continue to do so during the growing season. While grazing can remove leaves, flowers, and fruits of Kern mallow, it also reduces competition in areas dominated by aggressive nonnative plants, where Kern mallow does not thrive.

#### REFERENCES FOR ADDITIONAL INFORMATION:

#### **General references about California plants**

www.fws.gov/sacramento/es/plant\_spp\_accts/plant\_references.htm

For larger images and permission information see CalPhotos http://calphotos.berkeley.edu/.

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Last updated March 2, 2010